

favorable reconsideration and the initiation of interference proceedings with U.S. Patent No. 5,553,852 to *Higuchi*.

I. The Examiner's Rejections of Claims 1-8 Under 35 U.S.C. § 112, First Paragraph Has Been Overcome

The Examiner rejected claims 1-8 under 35 U.S.C. § 112, first paragraph as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor at the time the application was filed had possession of the claimed invention.

The proper test for claim support under 35 U.S.C. § 112, first paragraph, is whether the disclosure, as originally filed, reasonably conveys to one skilled in the art that the inventor had possession of the claimed subject matter rather than the presence or absence of literal support. *Ralston Purina Co. v. Far-Mar-Co., Inc.*, 772 F.2d 1570 (Fed. Cir. 1985). If the essence of the original disclosure supports the new claim limitation, the new claimed feature is not new matter. *In re Wright*, 866 F.2d 422 (Fed. Cir. 1989).

Furthermore, the U.S. Patent and Trademark Office bears the initial burden of presenting a *prima facie* case of unpatentability. Insofar as the written description requirement is concerned, that burden is only discharged by presenting evidence or reasons why persons skilled in the art would *not* recognize in the specification a description of the invention defined by the claims.

Presently, the Examiner has failed to meet the *prima facie* case for unpatentability since the support for the claims, as previously amended, can be found in the present application.

A. Claim 1

The Examiner rejected claim 1 and argued that it recites subject matter not sufficiently disclosed in the specification.

Each feature identified by the Examiner as "new matter" can be found within the specification of the present application. First, the claimed feature of the center core having a diameter of at least 29 mm can be found on page 35, lines 12-14, where the *preferred* core has a diameter of about 1.545 inches (i.e., 39.243 mm).

Applicant respectfully submits that the specification does not have to explicitly disclose each and every core diameter in the claimed range so long as the claimed core diameter range is reasonably conveyed to one skilled in the art.

Second, the specific gravity of the core of less than 1.4 can be found in the example on page 39, which shows the diameter of the core to be 1.545 inches (39.243 mm) and the weight of the core to be 36.5 grams. This weight and diameter results in a specific gravity of 1.154 (i.e., $36.5 \text{ grams} / 31.642 \text{ cm}^3$). Thus, the present specification discloses values within the claimed range. The specification is not required to explicitly disclose each and every specific gravity in the claimed range so long as the specific gravity of the core is reasonably conveyed to one skilled in the art.

Third, the intermediate layer having a thickness of at least 1 mm can be found on page 36, lines 5-6 of the present application, where the intermediate or inner cover layer is about 0.100 inches (2.54 mm) to about 0.010 inches (0.254 mm). In the examples, an intermediate or inner cover layer is disclosed having a thickness of 1.7 mm (page 39, line 12). Therefore, the present specification reasonably conveys to one skilled in the art the claimed intermediate layer thickness.

Fourth, the intermediate layer having a specific gravity of less than 1.2 can be found in Sample E of Table 7 on pages 41-42. Sample E is a 50/50 blend of Iotek 7030 and Iotek 8000 which have specific gravities of 0.96 and 0.954, respectively (see pp. 28 and 29). Similarly, while the data on Iotek 959 and Iotek 960 shown on page 15 does not specifically list the specific gravity, the attached sheet (Exhibit 1) shows the specific gravities of ionomers as being 0.920 to 0.990, which is less than the specific gravity of 1.2 as recited in claim 1. Furthermore, the specific gravity of the intermediate or inner cover layer (i.e., 0.920 to 0.990) is lower than the specific gravity of the core. Thus, the present specification reasonably conveys to one skilled in the art the claimed specific gravities for the intermediate layer.

Fifth, the intermediate layer having a hardness of at least 85 on a JIS C (Shore C) scale can be found on page 42, line 7, which shows a Shore C hardness of 96. Also, on page 42, line 7, a 50/50 blend of Iotek 959/960 has a Shore C hardness of 98. Therefore, the present specification reasonably conveys to one skilled in the art the claimed Shore C hardness value for the intermediate layer.

Sixth, the cover having a thickness of 1 to 3 mm is disclosed on page 36, lines 7-8, where the outer cover is 0.254 to 1.27 mm. Although the specification does not explicitly disclose the claimed cover thickness, the present specification reasonably conveys to one skilled in the art the claimed cover thickness.

For these reasons, claim 1 is proper and does not introduce any new matter in the present application.

B. Claim 3

The Examiner rejected claim 3 under 35 U.S.C. § 112, first paragraph, as containing new subject matter that was not described in the specification.

Regarding the cover having a hardness of 50 to 85 on the JIS C scale, the present specification discloses various ionomers that form the cover within the claimed JIS C range. Although the present specification does not explicitly disclose JIS C ranges for the cover, the present specification does disclose Shore D hardness values for particular ionomers that can be used to form the cover. Exhibit 2 shows a durometer scale comparison chart between Shore D and Shore C scales.¹ Although the chart is not used for conversion purposes, the chart does give one skilled in the art a reasonable basis for determining whether the ionomers disclosed in the present specification for the cover fall within the JIS C range recited in claim 3.

Page 15, line 15, discloses that the IOTEK 960 ionomer has a Shore D hardness of 57. Table 1 on page 18 discloses that the various PRIMACOR ionomers have a Shore D hardness between 40 and 50. Table 3 on page 27 discloses that SURLYN 8528 has a Shore D hardness of 60. Table 4 on page 28 discloses that IOTEK 4000 and IOTEK 4010 have a Shore D of 55; IOTEK 8020 has a Shore D of 58; and IOTEK 8030 has a Shore D of 59. Finally, Table 4 on page 29 discloses that IOTEK 7010 has a Shore D of 57; IOTEK 7020 has a Shore D of 55; and IOTEK 7030 has a Shore D of 55. Based upon the comparison chart in Exhibit 2, it would be clear to one skilled in the art that the present specification discloses ionomers that may be used to form the cover that have a hardness in the claimed range.

Therefore, it is clear from the specification that it reasonably conveys to one skilled in the art the recited JIS C range of 50-85 for the cover.

¹Please note that Shore C values are identical to JIS C values.

With regard to the claimed features of a center core having a hardness of 45 to 80 on the JIS C scale, Applicant respectfully submits that such range is inherent from the specification. A center core having a hardness of 45 to 80 on the JIS C (Shore C) scale is a very broad feature. A hardness of 45 to 80 on the JIS C (Shore C) scale nearly includes the entire range of such a scale. Only values at the very low end, i.e., less than 45, or at the high end, i.e., greater than 80, would not be included. However, any value within the large range of 45 to 80 falls within the present claim. Clearly, all of the preferred materials that make up the core in the present application are within such a range.

For at least these reasons, claim 3 is proper and does not introduce new matter into the present specification.

C. Claim 5

The Examiner rejected claim 5 under 35 U.S.C. § 112, first paragraph, as containing new subject matter which was not disclosed in the specification of the present application.

The diameter of the center core in the range of 29 to 37 mm is found in the specification when the maximum intermediate or inner cover layer and outer cover thickness are used so that the core of a 1.68 inch ball is 1.38 inches (i.e., 35.052 mm). Applicant duly notes that such a core diameter is preferred. However, it would be clear to one skilled in the art that the core diameter may change depending on the diameter of the ball. The present specification reasonably conveys to one skilled in the art that Applicant had possession of the claimed subject matter of the center core diameter having a range of 29 to 37 mm. Thus, claim 5 is proper and does not introduce new matter into the present specification.

D. Claim 6

In the present application, the difference in the specific gravity of the core (1.154) is less than the specific gravity of the intermediate or inner cover layer (0.920 - 0.990), equaling 0.234 to 0.164. Such a range is preferred and clearly falls within the claimed range. Therefore, claim 6 is proper and does not introduce new matter into the present specification.

E. Claim 7

The Examiner rejected claim 7, which recites the range for the specific gravity of the intermediate layer as 0.9 to 1.0, under 35 U.S.C. § 112, paragraph one. The preferred specific gravity of the intermediate layer as recited in claim 7 can be found in Sample E of Table 7, where a 50/50 blend of Iotek 7030/8000 have specific gravities of 0.96 and 0.954, respectively (see pp. 28 and 29), which are within the parameters of claim 7. Since such values are preferred, the claimed range is broader to also include less preferable ranges. Clearly, the present specification reasonably conveys to one skilled in the art that Applicant had possession of the claimed specific gravity in the range of 0.9 to 1.0. Thus, claim 7 is proper and does not introduce new matter in the present specification.

F. Claim 8

The Examiner rejected claim 8 under 35 U.S.C. § 112, paragraph one, stating that: "neither the upper limit (100) nor the lower limit (85) [of the hardness of the intermediate layer] were disclosed" In Table 7, pages 41-42, the intermediate cover preferably has a Shore C hardness of 96 to 98, which clearly falls within the claimed range. Again, the present specification reasonably conveys to one skilled in the art the claimed range. Thus, claim 8 is proper and does not introduce new matter in the present specification.

Applicants believe that, based upon the disclosure as originally filed, the claims of the present application, as copied from *Higuchi* (U.S. Patent No. 5,553,852) find support therein, either explicitly or inherently. As such, the rejection under 35 U.S.C. § 112, first paragraph, is improper and withdrawal of the rejection is respectfully requested.

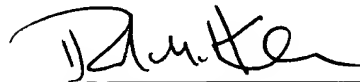
CONCLUSION

In view of the foregoing, Applicant respectfully submits that claims 1-8 are in condition for allowance. Applicant respectfully requests notification of allowability and the initiation of interference proceedings with U.S. Patent No. 5,553,852 to *Higuchi*. Should any issues remain, the Examiner is encouraged to contact the undersigned attorney in order to resolve any such issues.

Respectfully submitted,

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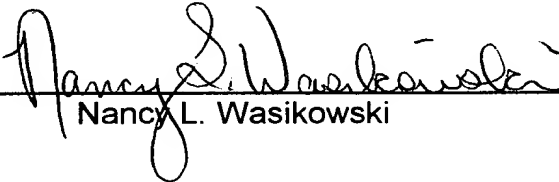


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CERTIFICATE OF MAILING

I hereby certify that this **AFTER FINAL RESPONSE** in connection with U.S. Patent Application Serial No. **08/926,246** is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: **Box AF**, Assistant Commissioner for Patents, Washington, D.C. 20231 on November 17, 2000.

By:


Nancy L. Wasikowski

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